



MARYLAND Department of Health

Public Health Preparedness and Situational Awareness Report: #2019:04

Reporting for the week ending 01/26/19 (MMWR Week #04)

February 1, 2019

CURRENT HOMELAND SECURITY THREAT LEVELS

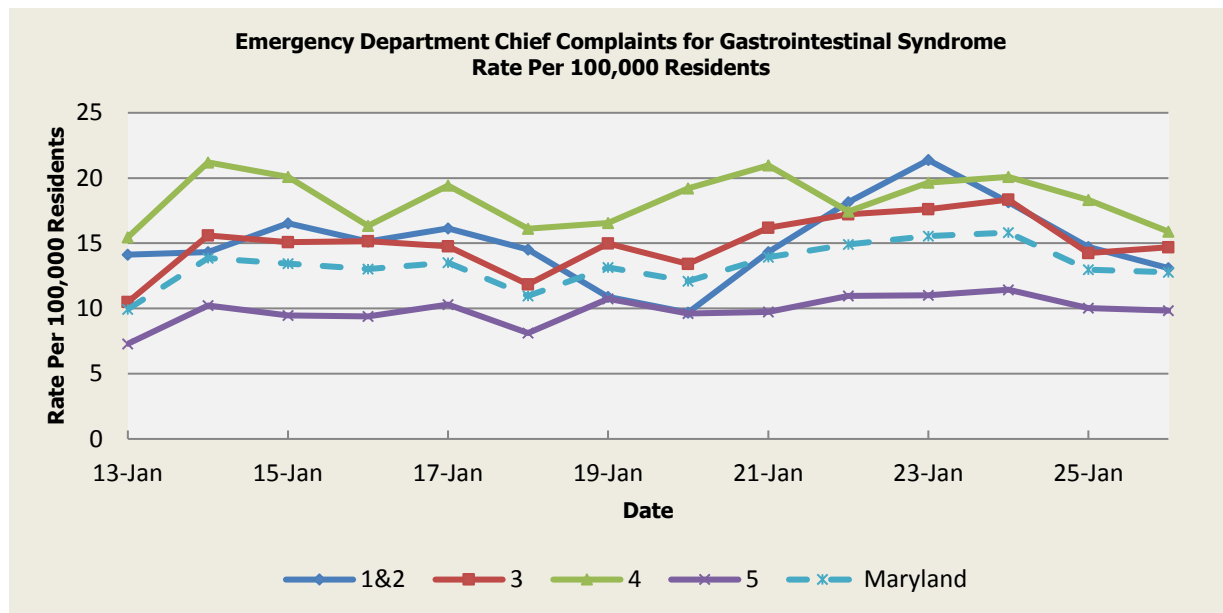
National:	No Active Alerts
Maryland:	Normal (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics): Graphical representation is provided for all syndromes (excluding the “Other” category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census. Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). Baltimore, MD: Maryland Department of Health; 2019.

(report continues on next page)

Gastrointestinal Syndrome



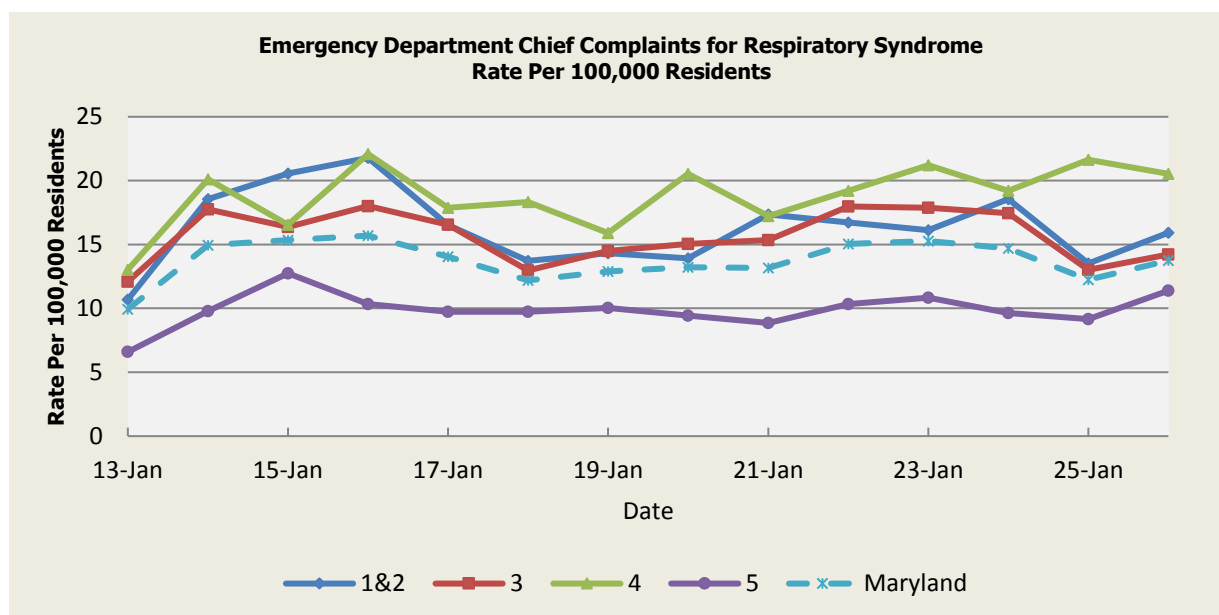
There were five (5) Gastrointestinal Syndrome outbreaks reported this week: five (5) outbreaks of Gastroenteritis in Assisted Living Facilities (Regions 3,4,5).

Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	13.10	15.04	15.77	10.16	13.06
Median Rate*	12.91	14.80	15.24	10.04	12.95

* Per 100,000 Residents

(report continues on next page)

Respiratory Syndrome



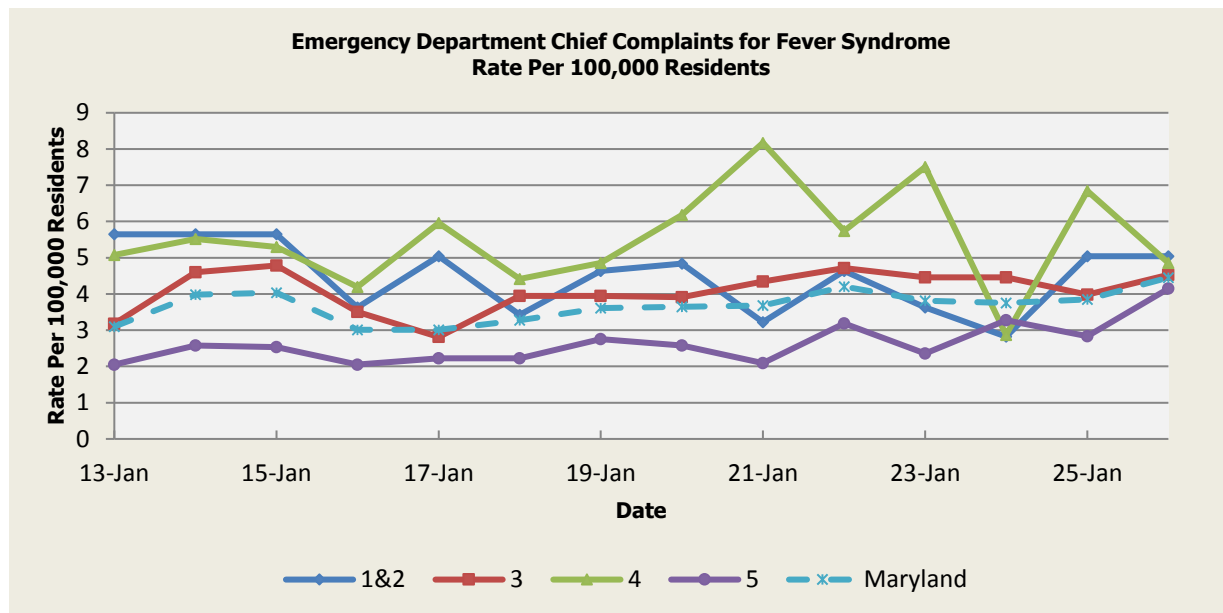
There were nine (9) Respiratory Syndrome outbreaks reported this week: two (2) outbreaks of Influenza in Nursing Homes (Regions 3,5); two (2) outbreaks of Influenza associated with Schools (Regions 4,5); one (1) outbreak of Influenza/Pneumonia in a Nursing Home (Region 3); one (1) outbreak of Influenza/Pneumonia associated with a Workplace (Region 3); one (1) outbreak of ILI/Pneumonia associated with a Daycare Center (Region 3); one (1) outbreak of Pneumonia in a Hospital (Region 3); one (1) outbreak of Pneumonia in a Nursing home (Region 5).

Respiratory Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.51	14.62	14.90	9.91	12.66
Median Rate*	12.10	14.07	14.13	9.52	12.20

* Per 100,000 Residents

(report continues on next page)

Fever Syndrome



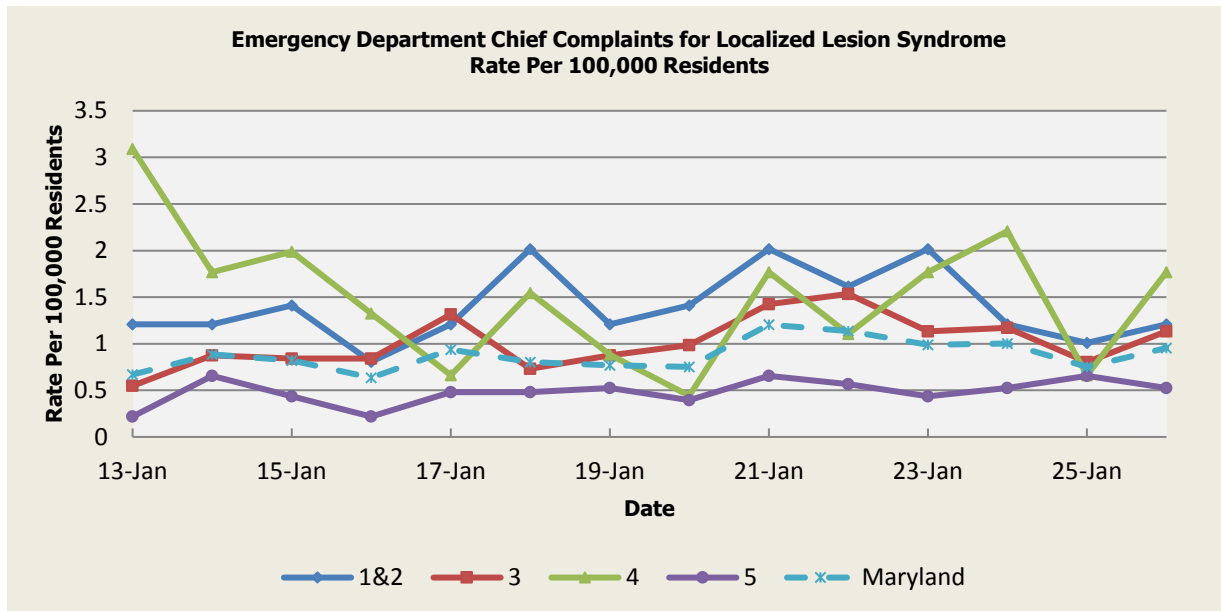
There were no Fever Syndrome outbreaks reported this week.

Fever Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.03	3.87	4.04	3.02	3.49
Median Rate*	2.82	3.76	3.97	2.92	3.36

**Per 100,000 Residents*

(report continues on next page)

Localized Lesion Syndrome



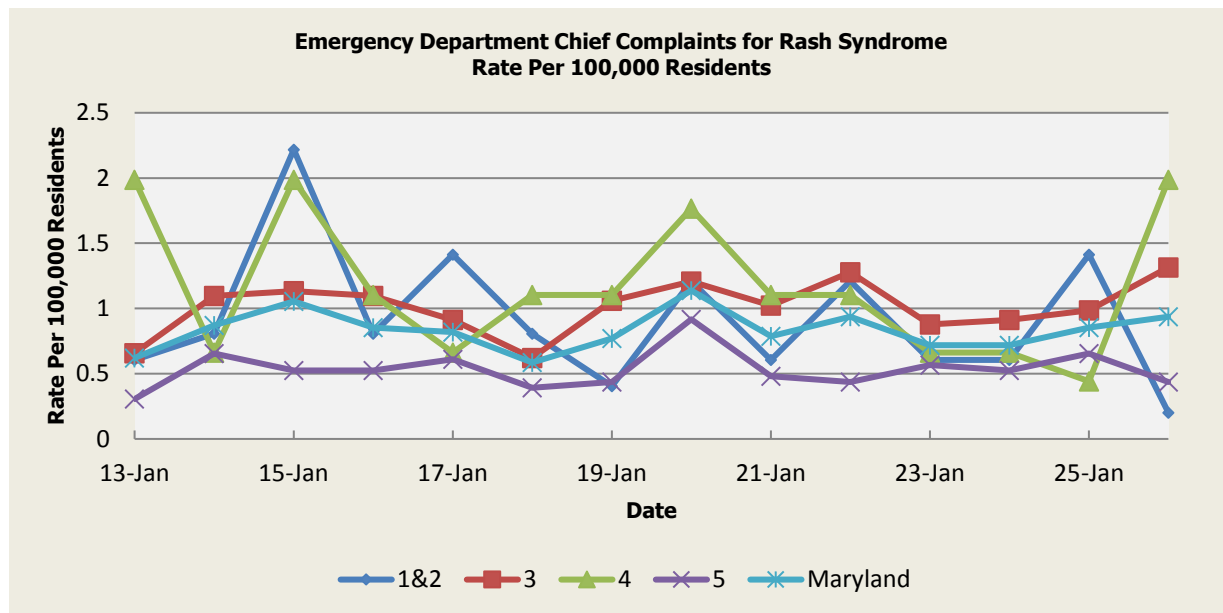
There were no Localized Lesion Syndrome outbreaks reported this week.

Localized Lesion Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.09	1.82	2.04	0.92	1.43
Median Rate*	1.01	1.75	1.99	0.87	1.37

* Per 100,000 Residents

(report continues on next page)

Rash Syndrome



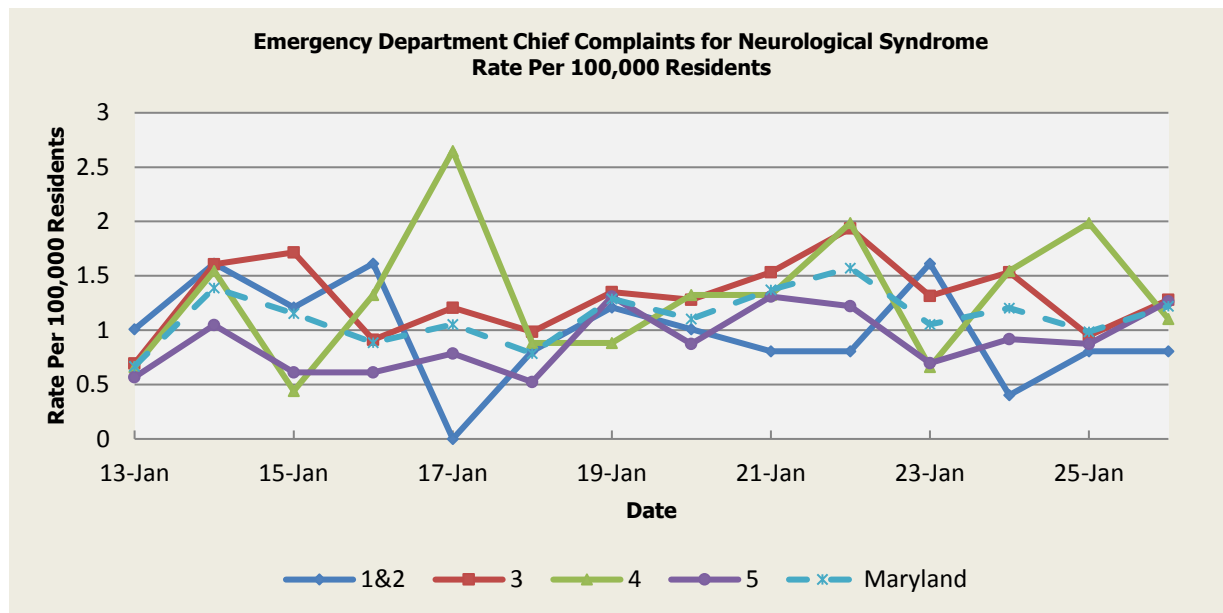
There were no Rash Syndrome outbreaks reported this week.

Rash Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.22	1.69	1.77	0.99	1.39
Median Rate*	1.21	1.61	1.77	0.96	1.34

* Per 100,000 Residents

(report continues on next page)

Neurological Syndrome



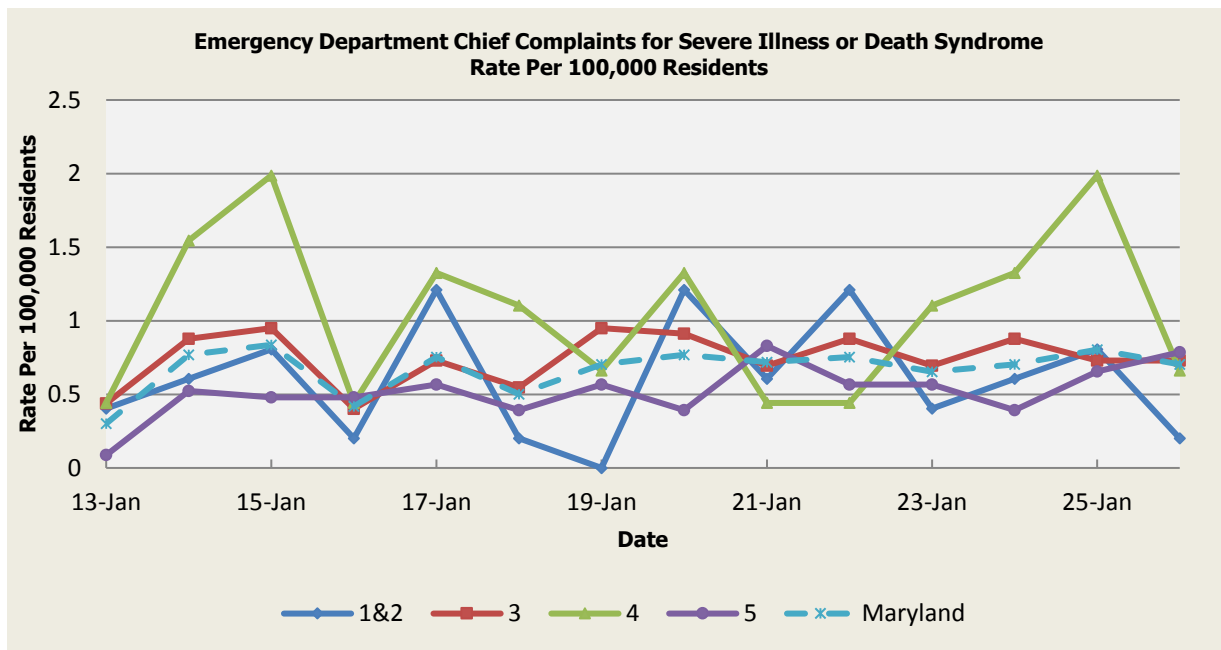
There were no Neurological Syndrome outbreaks reported this week.

Neurological Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.75	0.91	0.82	0.57	0.76
Median Rate*	0.60	0.80	0.66	0.52	0.67

* Per 100,000 Residents

(report continues on next page)

Severe Illness or Death Syndrome



There were no Severe Illness or Death Syndrome outbreaks reported this week.

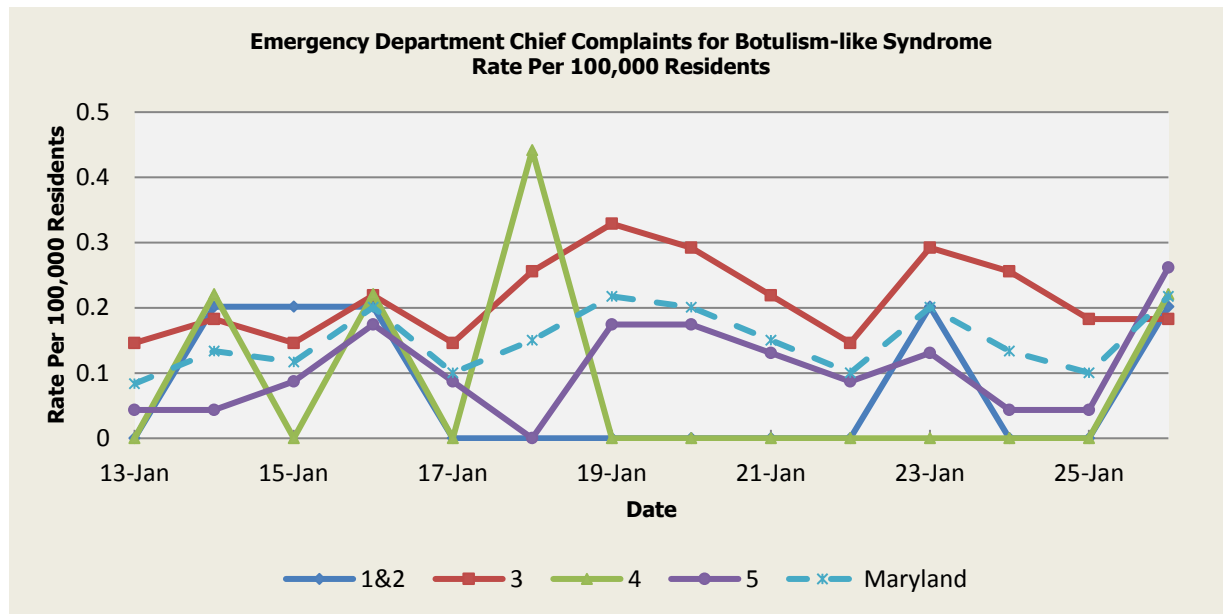
Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.66	0.90	0.83	0.50	0.72
Median Rate*	0.60	0.88	0.66	0.48	0.69

* Per 100,000 Residents

(report continues on next page)

SYNDROMES RELATED TO CATEGORY A AGENTS

Botulism-like Syndrome



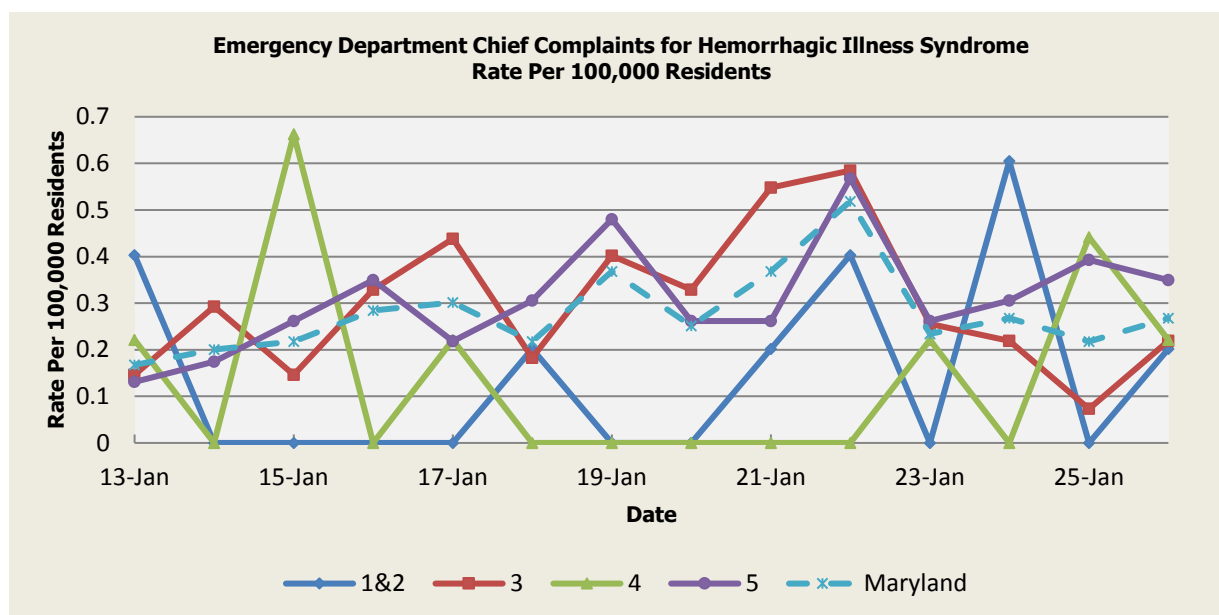
There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 1/14 (Regions 1&2,4), 1/15 (Regions 1&2), 1/16 (Regions 1&2,4,5), 1/18 (Regions 3,4), 1/19 (Regions 3,5), 1/20 (Regions 3,5), 1/23 (Regions 1&2,3), 1/24 (Region 3), 1/26 (Regions 1&2,4,5). These increases are not known to be associated with any outbreaks.

Botulism-like Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.07	0.11	0.05	0.07	0.09
Median Rate*	0.00	0.07	0.00	0.04	0.07

* Per 100,000 Residents

(report continues on next page)

Hemorrhagic Illness Syndrome



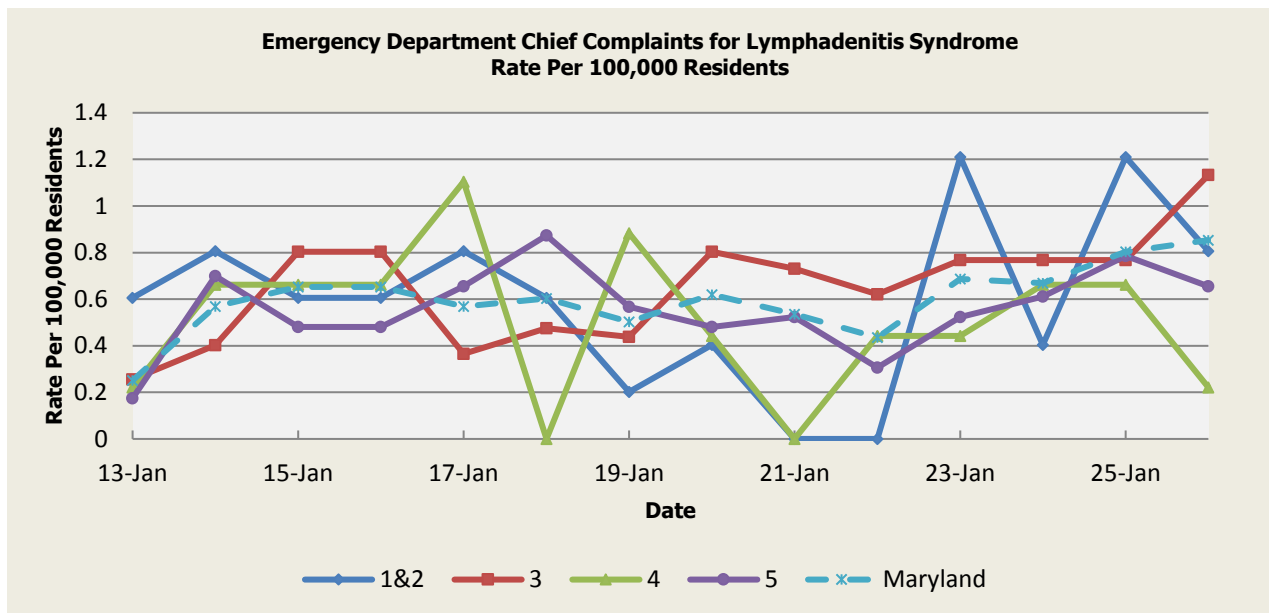
There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 1/13 (Regions 1&2,4), 1/15 (Regions 4,5), 1/16 (Regions 3,5), 1/17 (Regions 3,4), 1/18 (Regions 1&2,5), 1/19 (Regions 3,5), 1/20 (Regions 3,5), 1/21 (Regions 1&2,3,5), 1/22 (Regions 1&2,3,5), 1/23 (Regions 4,5), 1/24 (Regions 1&2,5), 1/25 (Regions 4,5), 1/26 (Regions 1&2,4,5). These increases are not known to be associated with any outbreaks.

Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.04	0.15	0.04	0.12	0.12
Median Rate*	0.00	0.07	0.00	0.04	0.07

* Per 100,000 Residents

(report continues on next page)

Lymphadenitis Syndrome



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 1/14 (Regions 1&2), 1/17 (Regions 1&2,4), 1/18 (Regions 5), 1/19 (Region 4), 1/23 (Regions 1&2), 1/25 (Region 5), 1/26 (Regions 1&2). These increases are not known to be associated with any outbreaks.

Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.34	0.57	0.39	0.36	0.46
Median Rate*	0.20	0.47	0.44	0.31	0.40

* Per 100,000 Residents

(report continues on next page)

MARYLAND REPORTABLE DISEASE SURVEILLANCE

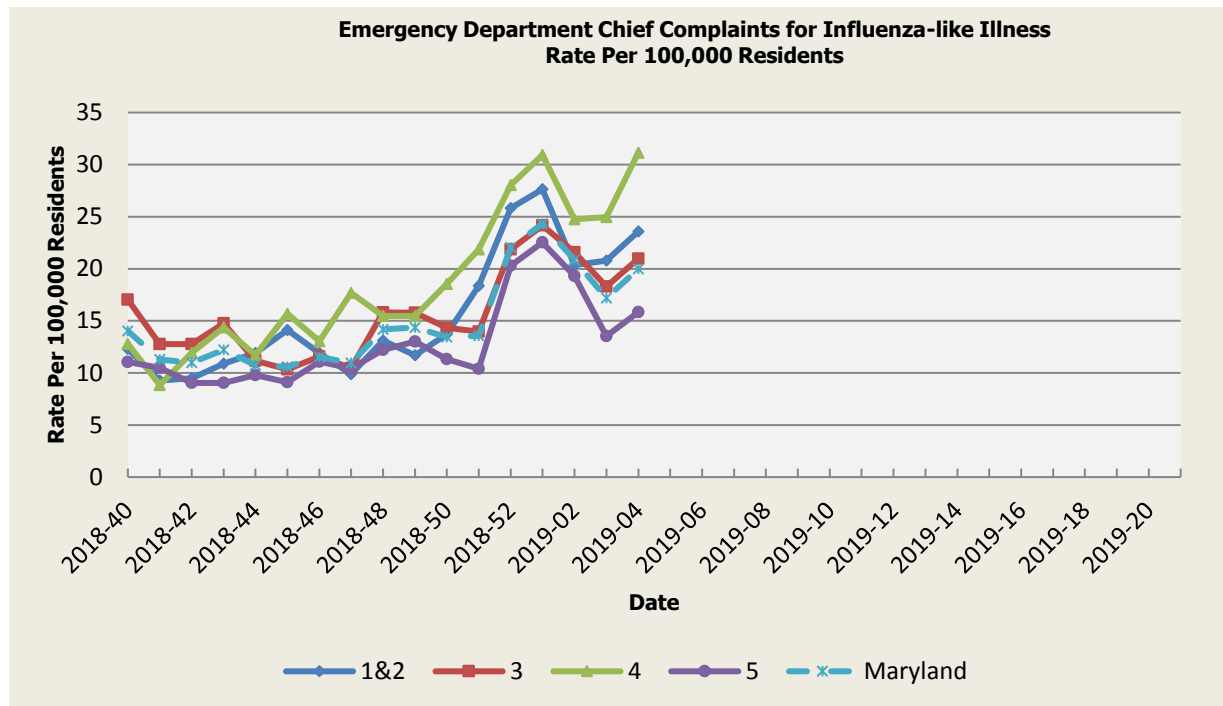
Reportable disease data from the National Electronic Disease Surveillance System (NEDSS) that feeds into ESSENCE is currently being validated. We will include these data in future reports once the validation process is complete.

(report continues on next page)

SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October 2018 through May 2019). Seasonal Influenza activity for Week 04 was: High Intensity.

Influenza-like Illness

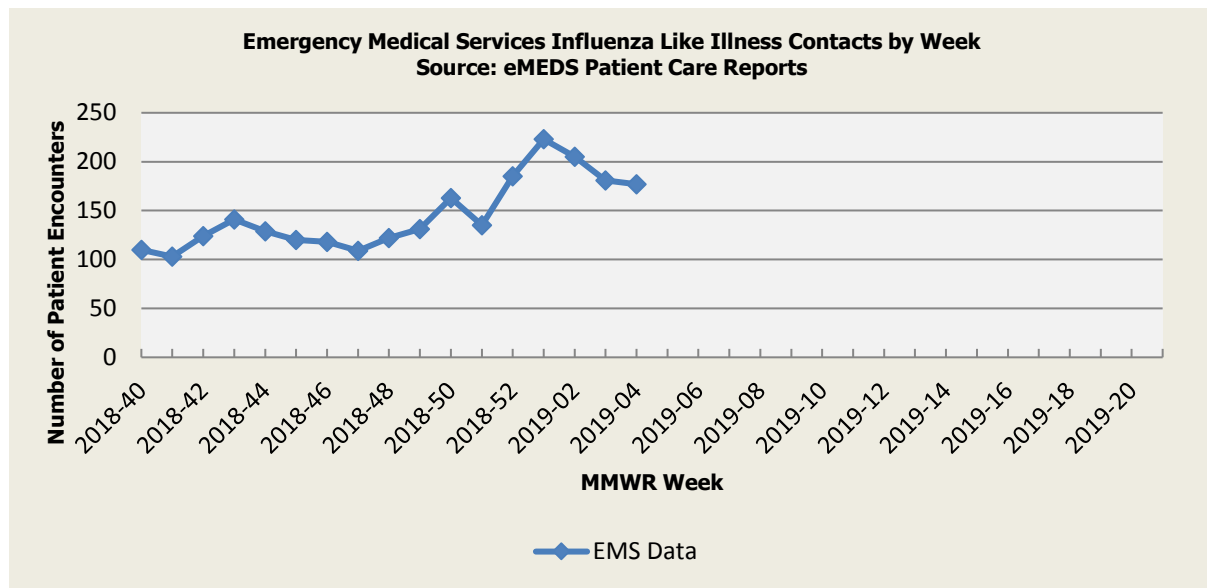


Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	9.77	12.99	12.31	10.99	11.91
Median Rate*	7.66	10.01	9.05	8.56	9.12

* Per 100,000 Residents

(report continues on next page)

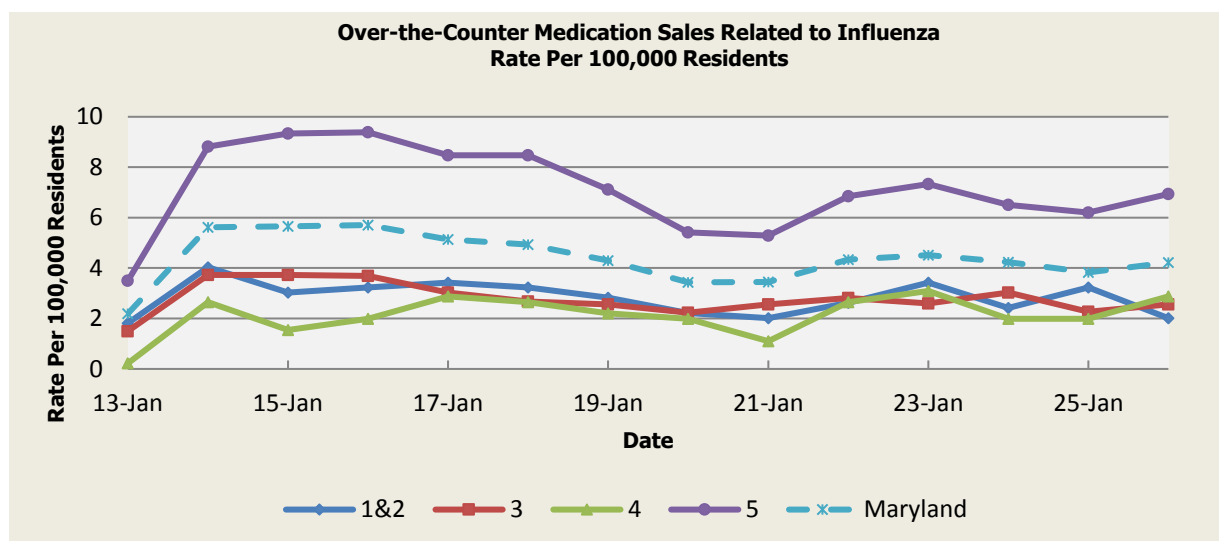
Influenza-like Illness Contacts by Week



Disclaimer on eMEDS flu related data: These data are based on EMS Pre-hospital care reports where the EMS provider has selected “flu like illness” as a primary or secondary impression of a patient’s illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. These data are reported for trending purposes only.

(report continues on next page)

Over-the-Counter Influenza-Related Medication Sales



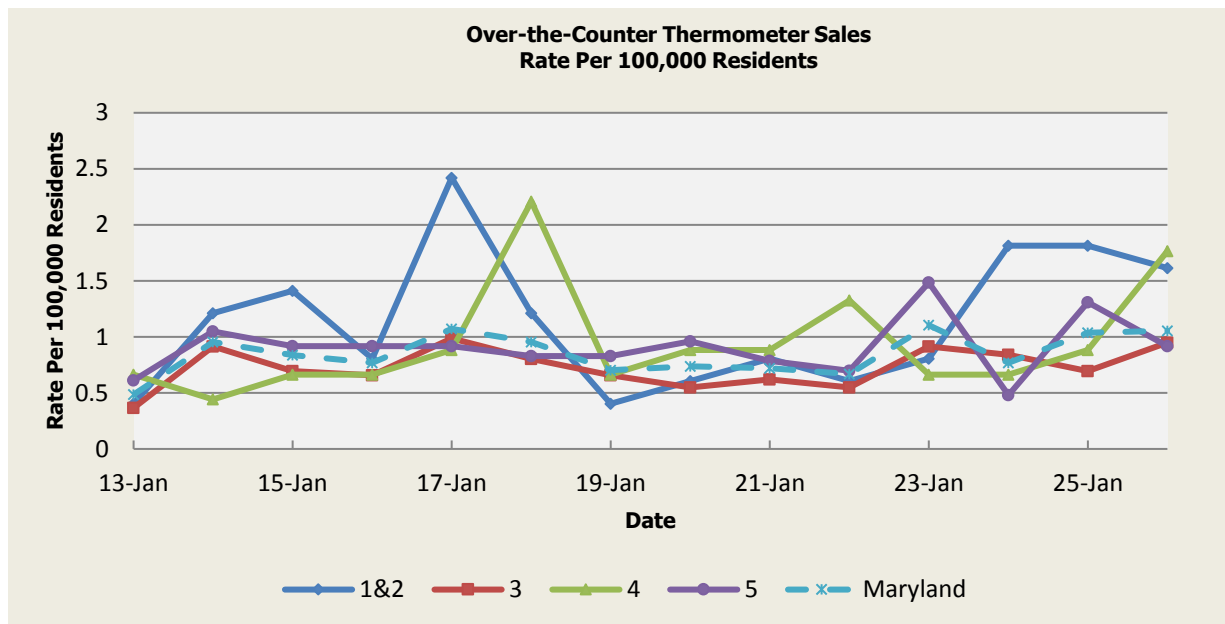
There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

OTC Medication Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.62	4.68	2.75	8.10	5.75
Median Rate*	3.02	3.95	2.43	7.47	5.10

* Per 100,000 Residents

(report continues on next page)

Over-the-Counter Thermometer Sales



There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

Thermometer Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.12	2.98	2.35	3.95	3.31
Median Rate*	2.82	2.81	2.21	3.80	3.16

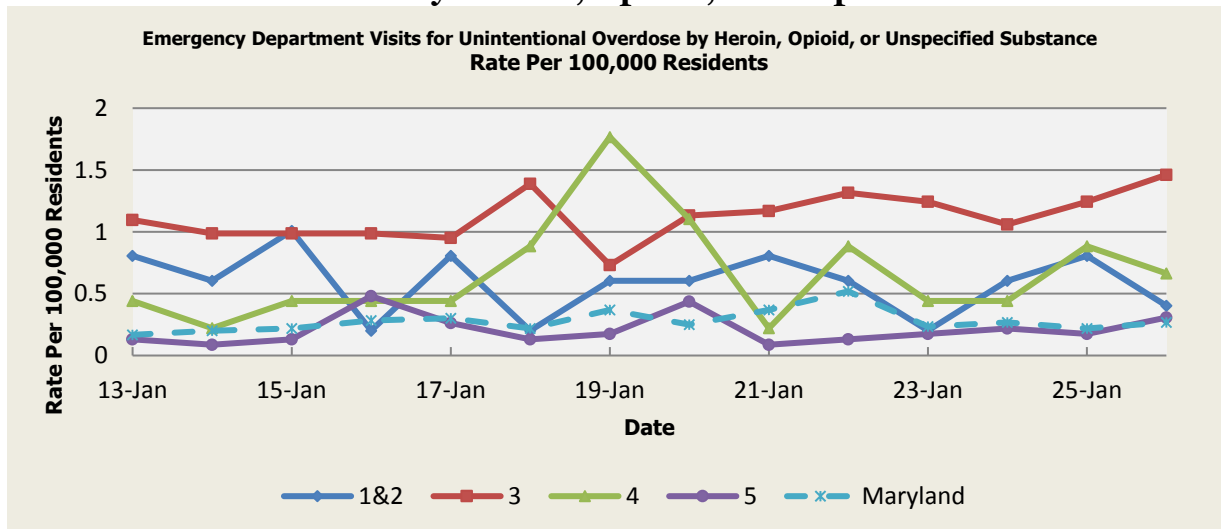
* Per 100,000 Residents

(report continues on next page)

SYNDROMIC OVERDOSE SURVEILLANCE

The purpose of this section is to characterize non-fatal ED visit trends for acute unintentional overdose by Heroin, Opioid or Unspecified substance among Maryland residents captured by ESSENCE data, including chief complaint and discharge diagnosis. ED visits that are identified as unintentional overdose by Heroin, Opioid or Unspecified substance include those with medical and non-medical use of a prescription Opioid or where the substance is not specified, given evidence that most fatal overdoses are Opioid-related.

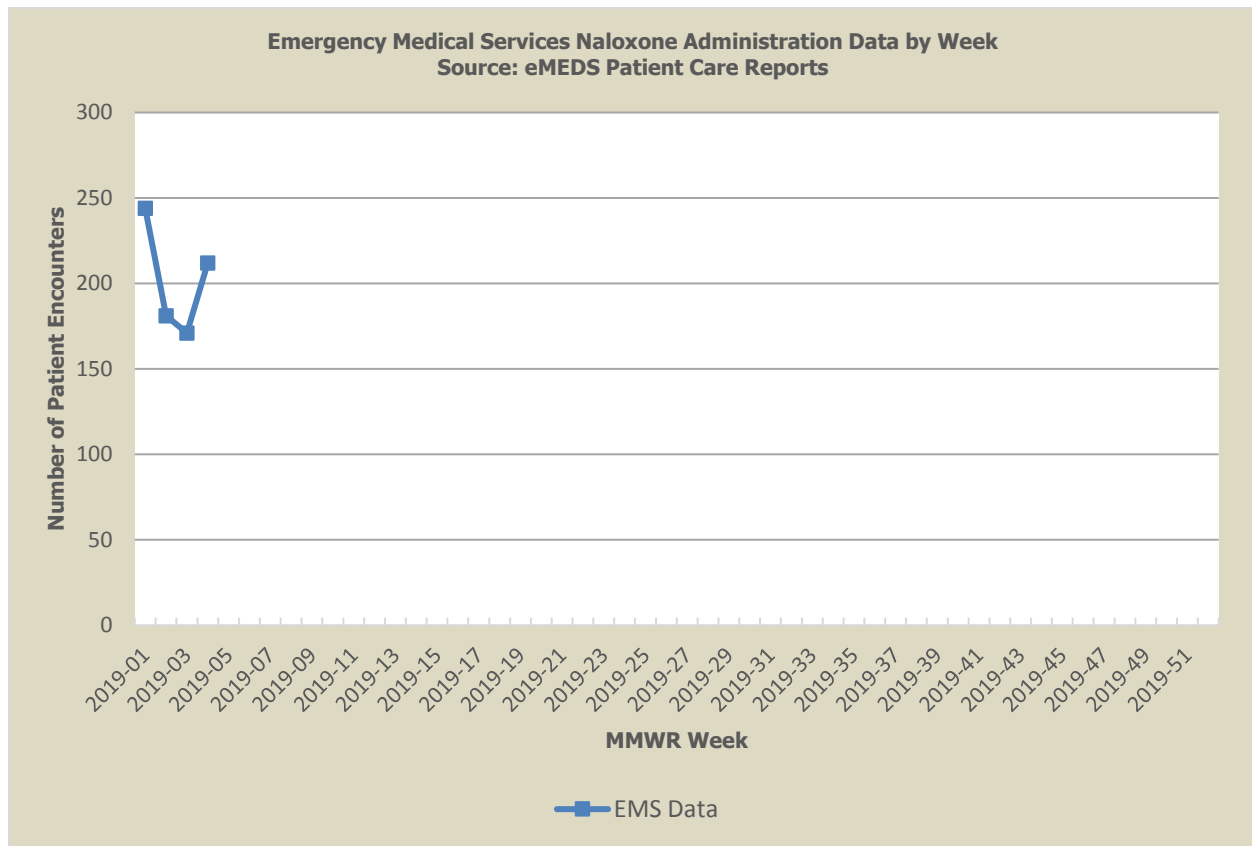
Unintentional Overdose by Heroin, Opioid, or Unspecified Substance



Disclaimer on ESSENCE Overdose related data: ESSENCE chief complaint and discharge diagnosis query for overdose-related illness includes but is not limited to the following terms: heroin, opioid, speedball, dope, fentanyl, naloxone, narcain, and overdose.

(report continues on next page)

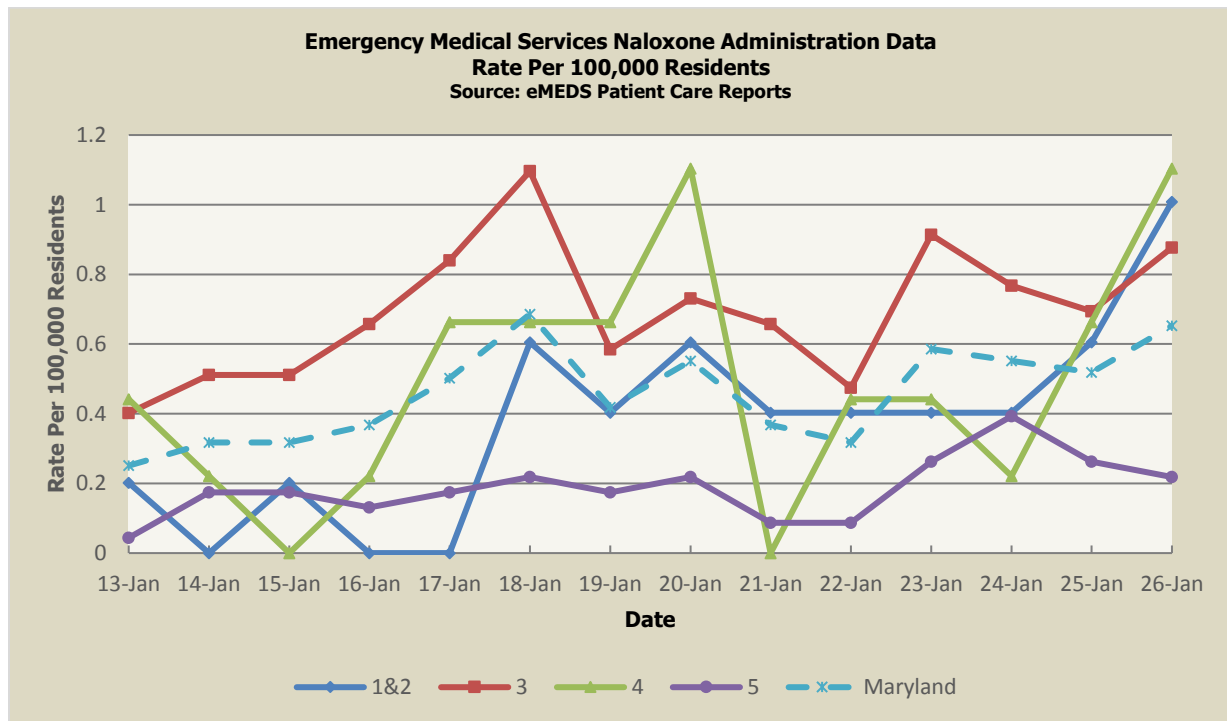
Naloxone Administration Data by Week



Disclaimer on eMEDS naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

(report continues on next page)

Naloxone Administration Data



Disclaimer on eMEDS Naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

(report continues on next page)

PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. Presently, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national, and global levels are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of January 31, 2019, the WHO-confirmed global total (2003-2018) of human cases of H5N1 avian influenza virus infection stands at 860, of which 454 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

AVIAN INFLUENZA

There were no relevant avian influenza reports this week.

HUMAN AVIAN INFLUENZA

There were no relevant human avian influenza reports this week.

NATIONAL DISEASE REPORTS

BRUCELLOSIS (MULTISTATE), 28 Jan 2019, The CDC has announced that milk from a Pennsylvania farm, which has been linked to an antimicrobial-resistant bacterium, sold in Iowa. According to the CDC, 3 cases of brucellosis were directly connected to milk consumed from Miller's Biodiversity Farm in Quarryville, PA. The milk was shipped to retailers across the state and in 18 other states. Read More: <http://www.promedmail.org/post/6280591>

INTERNATIONAL DISEASE REPORTS

HANTAVIRUS (ARGENTINA), 31 Jan 2019, The Chubut [province] Ministry of Health confirmed in its most recent official statement that there are now 31 confirmed cases of hantavirus [infections], while there are others who are currently under observation. The details of

the information provided by the provincial health office explained that on 25 Jan 2019, an adult patient who had been convalescent from this disease was released from the Esquel Zone Hospital. Also, the same statement mentioned that a hantavirus infection positive patient was released from the intensive care unit in the same hospital and is convalescing in a ward in that hospital. Read More: <http://www.promedmail.org/post/6287011>

POLIOMYELITIS (AFGHANISTAN), 30 Jan 2019, Afghanistan's 1st polio case in 2019 was reported in Kandahar province, where a 22-month-old girl from Spin Boldak district was infected by the poliovirus. According to a statement the Minister of Public Health, Dr Ferozuddin Feroz said, 'this case indicates that the poliovirus is still transmitting in Kandahar and the South region. This child's life is now changed forever. It is really sad that she will never walk properly again, therefore I call upon all of you, our Muslim parents, caregivers, community elders, and health workers to work together to protect our innocent children against this disease and eradicate polio in our country.' Read More: <http://www.promedmail.org/post/6285898>

SALMONELLOSIS (CANADA), 29 Jan 2019, The Canadian Food Inspection Agency recently announced that another brand of chicken nuggets was just recalled for salmonella. This time, the recall is on Crisp and Delicious chicken nuggets with a best before date of 19 July 2019. These nuggets are the latest in a massive nationwide outbreak that has resulted in over 500 illnesses. Read More: <http://www.promedmail.org/post/6284542>

INFLUENZA (NEPAL), 29 Jan 2019, Three people have tested positive for swine flu [influenza A/H1N1] at Om Hospital and Research Centre [Kathmandu], while 3 others are suspected to have been infected with the same virus. Read More: <http://www.promedmail.org/post/6275544>

LEPTOSPIROSIS (FIJI), 29 Jan 2019, Four people have died from leptospirosis in the Central Division [Fiji] so far this year [2019]. This has resulted in the Ministry of Health declaring an outbreak in the division. There have been 69 cases of leptospirosis in the Central Division from 1 Jan [2019], with 18 people requiring admission to the CWM Hospital. A majority of the cases are between the age groups of 1-19 and 20-29. Read More: <http://www.promedmail.org/post/6284444>

LEGIONELLOSIS (NEW SOUTH WALES), 29 Jan 2019, Owners of buildings in Sydney's CBD [central business district] have been put on notice after 4 workers recently contracted Legionnaires' disease. NSW [New South Wales] Health has reported the outbreak could be from contaminated water [from] cooling towers in a number of large buildings. Unlike many other bacterial diseases, Legionnaires' disease isn't spread by human contact, but it typically occurs when a person breathes in contaminated water or dust. Read More: <http://www.promedmail.org/post/6284443>

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.health.maryland.gov/> or follow us on Facebook at www.facebook.com/MarylandOPR.

More data and information on influenza can be found on the MDH website:
<http://phpa.health.maryland.gov/influenza/fluwatch/Pages/Home.aspx>

Please participate in the Maryland Resident Influenza Tracking System (MRITS):
<http://flusurvey.health.maryland.gov>

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

Prepared By:

Office of Preparedness and Response, Maryland Department of Health
300 W. Preston Street, Suite 202, Baltimore, MD 21201
Fax: 410-333-5000

Kortney Marshall
Graduate Student Intern
Office: 410-767-8262
Email: Kortney.Marshall@maryland.gov

Jennifer Stanley, MPH
Epidemiologist, Biosurveillance Program
Office: 410-767-2074
Email: Jennifer.Staley@Maryland.gov

Jessica Goodell, MPH
Career Epidemiology Field Officer, CDC
Office: 410-767-6745
Email: Jessica.Goodell@maryland.gov

Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE
Regions 1 & 2	Allegany County Frederick County Garrett County Washington County
Region 3	Anne Arundel County Baltimore City Baltimore County Carroll County Harford County Howard County
Region 4	Caroline County Cecil County Dorchester County Kent County Queen Anne's County Somerset County Talbot County Wicomico County Worcester County
Region 5	Calvert County Charles County Montgomery County Prince George's County St. Mary's County

